

- B. MANTIDÆ (Ed. Bordage).—*Mantis prasina*, *M. pustulata*.  
 C. BLATTIDÆ (Brisout, Bateson, and Brindley).—*Periplaneta americana*, *P. australasie*, *P. orientalis*, *Blabera atropos*, *Nyctibora latipennis*, *N. sericea*, *Epilampra cinerea*, *Homalosilpha ustulata*, *Leucophaea surinamensis*, *Monachoda grossa*, *Panesthia javanica*, *Phyllodroma germanica*.

It seems to follow from these observations that as a rule tetramerous regeneration of the tarsus in Orthoptera pentamera after self-mutilation has its seat in the trochanterofemoral groove.

X. — *On the Rutelid Beetles of the Transvaal; an Enumeration of a Collection made by Mr. W. L. Distant.*  
 By GILBERT J. ARROW, F.E.S.

THE insects enumerated in this paper form part of the large collection made by Mr. W. L. Distant in successive visits to the Transvaal during the years 1890–1 and 1893–6. Of the new species described here types have been kindly presented by him to the British Museum.

*Anomala transvalensis*, Arrow, Trans. Ent.  
 Soc. Lond. 1899, p. 258.

*Anomala Distanti*, Arrow, *ibid.*

These two species are remarkable for sexual differentiation in the structure of the claws, the female having divided claws upon each of the anterior pairs of legs and the male upon the first pair only.

*Anomala ustulata*, sp. n.

Elongato-ovata, pallide testacea, capite (clypeo paulo dilutiore), thoracis vittis tribus, scutelli margine (superficie tota rarius) suturaque nigris, pygidio aliquando plus minusve fusco, tarsis ferrugineis; capite parvo, rugoso, clypei margine valde reflexo; prothorace brevi, lateribus regulariter arcuatis, angulis posticis obtuse rotundatis, subtilissime punctato, linea media obsolete impresso, vitta longitudinali media et duabus obliquis lateralibus ad basis medium omnibus directis, nigris; scutello crebre punctato; elytris elongatis, post mediam ampliatis, profunde punctato-striatis, striis nonnunquam fuscis; pygidio subtiliter punctato-rugoso; tibiis anticis acute bidentatis, tarsorum anticorum et intermediarum utroque sexu unguibus externis apice fassis.

Long. 16–18 mm.

*Hab.* Pretoria.

This insect appears to be not uncommon. I have seen it in various collections. Although somewhat variable, it is very readily recognizable by the three dark marks, resembling a *fleur-de-lis*, which have the appearance of being burnt into the thorax.

*Anomala nigrovestita*, sp. n.

Elongato-ovalis, rufa, elytris nigris, pedum intermediorum et posteriorum tibiis tarsisque nigris vel fuscis; capite parvo, punctato-rugoso, clypei margine semicirculari, valde reflexo; prothorace parum transverso, antice valde contracto, cum scutello subtiliter punctato; elytris fere rugose striato-punctatis; pygidio leviter striolato; pectore dense fulvo-hirto; pedibus gracilibus, tibiis anticis fortiter bidentatis, tarsorum anteriorum utroque sexu unguibus externis fissis.

Long. 14–17 mm.

*Hab.* Johannesburg.

The species is peculiar both in form and colouring, but seems to be more closely related to *A. vetula*, Wiedem., than to any other known species of the genus; although that insect has all the claws simple, whereas the present one has a divided claw on the front tarsus. In its general form and sculpture, and especially in the size and shape of the head, it distinctly recalls that species.

*Anomala marginicollis*, sp. n.

Parallela, subdepressa, testacea, capite, prothoracis disco, scutello clytrisque fusco-æneis, tibiis tarsisque fusco-rufis; clypeo castaneo cum fronte rugoso-punctato, vertice haud crebre punctato, prothoracis marginibus angustis lateralibus et angulis anticis testaceis, undique subtiliter punctato; scutello crebre punctato; clytris grosse punctato-striatis, interstitiis parce subtilissime punctatis, marginibus perspicue membranaceis; pygidio testaceo, grosse punctato; pedum anteriorum et intermediorum unguibus externis fissis, ♂ anteriorum lobo interiore late expanso.

Long. 11½ mm.

*Hab.* Pienaars River.

This species, of which there are three specimens, of both sexes, belongs to the small group of African *Anomalæ* represented by *A. resplendens* of Fåhræus, characterized by their rectangular and somewhat depressed form.

There are several other apparently new species of this genus, which, however, are represented by one sex only and cannot properly be described at present.

*Peripopillia basalis*, Blanch.

This has evidently a wide range, having been previously recorded from Natal and from Zanzibar.

*Popillia bipunctata*, F.

Mr. Distant collected a series of this common insect showing all stages from the typical form to the variety *limbata*, described by Boheman as another species.

*Nannopopillia major*, sp. n.

Subparallela, nigro-ænea, dense griseo-vestita; prothorace cum pedibus viridi-æneis, elytris nigris, dimidio anteriore testaceo sutura callisque humeralibus exceptis; clypeo subquadrato cum fronte granulato; prothorace undique fortiter punctato, medio obsolete sulcato, angulis anticis fere rectis; scutello grosse irregulariter punctato; elytris profunde punctato-sulcatis; pygidio punctato-rugoso, basis lateribus longe albo-hirtis.

Long.  $9\frac{1}{2}$  mm.

*Hab.* Pretoria. A single male specimen.

The genus *Nannopopillia* has been formed by Herr Kolbe for *Popillia minuscula*, Harold, to which this species has evidently a very close relationship. It is larger, however, and the prothorax, although coarsely punctured, is not clothed with hairs except at the sides. There are long hairs upon the ventral part of the pygidium, which are probably peculiar to the male sex. As in the typical species, the larger claw of the middle as well as the front tarsus is cleft, whereas in the true *Popillia* this is always undivided in the male.

*Phænomeris Beschkei*, Mannerh.

This beautiful insect is common throughout a large part of South and East Africa.

*Adoretus hirtellus*, Lap.

This appears to be the most abundant of the numerous African species of *Adoretus*. In the Munich Catalogue it is identified with several African and Oriental species under the common name of *A. umbrosus*, Fabr., which Burmeister has pronounced to be the correct name of the present insect; but from Fabricius's description I can only regard this as very doubtful. *A. cinerarius*, Burm., is a synonym of *hirtellus*, and also *A. punctipennis*, Fähr., the insect being found over a large part of Africa; but there seems to me to be little reason to suppose that it occurs beyond that continent, or that any Oriental species ranges so far.

*Adoretus xanthochrous*, Har.

Two specimens were found at Barberton.

*Adoretus impurus*, Fähr.

A series of specimens from Pretoria shows *A. picticollis* of Fähræus, as suggested by that author, to be only a variety of *A. impurus*; and *A. flaveola*, Fähr., will probably prove to be also a pale form of the same species.

*Adoretus ictericus*, Burm.

A single specimen of this was brought from Barberton.

*Adoretus cupreus*, sp. n.

Elongato-ovatus, latus, castaneus, cupreo-nitens, supra parce subtus densius griseo-hirtus vel squamosus; capite mediocre, rugoso, clypeo arcuato ustulato; prothoraco latitudine triplo latiore, creberrime punctato, parce setuloso; scutello rugoso; elytris subtiliter rugoso-punctatis, obsolete costatis, parce setulosis, ad costulas squamis albis majoribus sparsatis, lateribus totis arcuatis. Long.  $10\frac{1}{2}$ –12 mm.

*Hab.* Barberton, and in Natal.

This species has apparently some affinity with *A. picinus*, Bohem., which, however, has the prothorax coarsely punctured and the sides of the elytra straight as far as the middle. In *A. cupreus* the width of the elytra is greatest at the middle and the entire sculpture is very fine and close.

I have only seen the female of this insect, the type of which is a specimen from Natal in the British Museum.

*Adoretus nasutus*, Fähr.

A specimen was found at the Pienaars River.

*Adoretus tessulatus*, Burm.

This has also been described as *A. maculatus* by Fähræus. It is widely distributed in Southern and Eastern Africa. Mr. Distant found it at Pretoria, Pienaars River, and Zoutspan, in the Transvaal, and in the British Museum there are specimens from the Zambesi, Lake N'gami, and British East Africa.

*Adoretus decoratus*, sp. n.

Breviter ovatus, castaneus, capitis vertice, prothoracis disco maculisque elytralibus prope marginem externam, scutellum et apicem, indistincte fusco-æneis, corpore subtus cum pygidio rufo-

fusco, pedibus castaneis; undique sat dense fulvo-setosus vel squamosus, squamis albis aggregatis lineis tribus prothoracis, scutello elytrorum maculisque magnis rotundatis decoratus; capite parvo, prothorace antice paulo contracto, elytris medio ampliatis, omnibus grosse et laxè punctatis.

Long. 9 mm.

*Hab.* Pretoria.

This little insect is peculiar both for its short oval form and the pattern of white scales with which it is adorned. It appears to be fairly abundant where it occurs.

XI.—On *Hymenochirus*, a new Type of Aglossal Batrachians.  
By G. A. BOULENGER, F.R.S.

THE natural Suborder of Aglossal Batrachians has so long been known from two genera only, the South-American *Pipa* and the African *Xenopus*, that the discovery of a third genus is a matter of great interest, the more so as I shall be able to show that the new type stands in no very close relation to either of its nearest allies, and affords subject for comment on the classification and the geographical distribution.

In 1896 there appeared a very unsatisfactory description, accompanied by a figure, of a new Aglossal frog named *Xenopus Boettgeri*, Tornier (*Kriechthiere Deutsch-Ost-Afrikas*, p. 163), discovered by Stuhlmann at Ituri, near Wandesoma, German East Africa. From the description and figure I at once recognized that the new species could not be maintained in the genus *Xenopus*, and accordingly proposed to make it the type of a new genus, *Hymenochirus* (*Ann. & Mag. N. H.* [6] xviii. 1896, p. 420), distinguished by the half-webbed fingers, the incompletely webbed toes, the third of which exceeds the fourth in length, and, above all, by the absence of lines of sensory muciferous canals on the body. I added that no doubt a careful examination of the type specimen would reveal further differences and suggested the application of the Röntgen rays as a means of obtaining some information on the osteological characters of the unique example. I could not then have imagined that even the presence or absence of teeth had not been ascertained.

Fortunately for the progress of science the frog has now been rediscovered on the Benito River, French Congo, by Mr. G. L. Bates, from whom the British Museum has received several specimens, which I am unable to separate from the East-African type, as far as I am able to judge from Tornier's description and figure. Now, *Hymenochirus* proves